

Computer Science III Honors
Unit 19: Serialization Lab
Lab – ShoppingCart

Files needed from myPISD or Template: Item.java, ShoppingCart.java, Shop.java

The purpose of this lab is to practice reading from and writing to files using serialization, and to further practice handling exceptions.

You are to add menu items S and L to Shop.java. Menu item S will save the cart to a file. Menu item L will load the cart from a file. Make the following changes to Shop.java

- Update the printMenu method to add these two options
- Add two more cases to the switch statement. Fill in the cases to read and write the ShoppingCart object using the object stream.

You may use the JFileChooser, or just text input for the filenames, but you must handle exceptions properly. DO NOT hardcode the name of the file, or even the file extension. Allow the user to specify.

ALIASING ISSUE:

You will encounter an aliasing issue when you read in the ShoppingCart with the readObject method. You have to assign basket (which is the parameter version of myCart), and when you use assignment, you break the alias. You need to add a method to ShoppingCart that allows you to copy a parameter ShoppingCart. Your method needs to make a deep copy (there should be no remaining aliasing between this ShoppingCart and the parameter ShoppingCart). We practiced this in AP, but let me know if you need a reminder. Javadoc your new method (of course!).

BONUS:

Add exception handling to all of the necessary cases to handle bad input. After this process, this program should never crash! Don't just take them back to the main menu if they mess up entering an item price or quantity, though. Let them re-enter required values until they get it right.